

Planning Secretary's Environmental Assessment Requirements

Section 4.12(8) of the *Environmental Planning and Assessment Act 1979*
 Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*

Application Number	SSD-9750
Proposal	<p>The Marulan Quarry Project, which involves:</p> <ul style="list-style-type: none"> • establishing a quarry to extract and process up to 500,000 tonnes of hard rock per annum for up to 18 years; • importing virgin excavated natural material (VENM), excavated natural material (ENM) and other clean fill material for rehabilitation purposes; • constructing associated site infrastructure and amenities; • transporting material off-site via public roads; and • progressively rehabilitating the site.
Location	16501 Hume Highway, Marulan (Lots 3 and 4 DP 247199 and Lot 7001 DP 1025585)
Applicant	Global Quarries Australia Pty Ltd
Date of Issue	10 March 2020
General Requirements	<p>The Environmental Impact Statement (EIS) for the development must comply with the requirements in Clauses 6 and 7 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>.</p> <p>In particular, the EIS must include:</p> <ul style="list-style-type: none"> • a stand-alone executive summary; • a full description of the development, including: <ul style="list-style-type: none"> – the resource to be extracted, including the amount, type and composition; – the site layout and extraction plan, including cross-sectional plans; – the production process and processing activities, including the in-flow and out-flow of materials and points of discharge to the environment; – surface infrastructure and facilities (including any infrastructure that would be required for the development, but the subject of a separate approvals process); – a waste (overburden, rejects, tailings etc) management strategy; – a water management strategy; – a rehabilitation strategy to apply during, and after completion of, extraction operations, and proposed final use of site; and – the likely interactions between the development and any existing, approved or proposed development in the vicinity of the site; • a strategic justification of the development focusing on site selection and the suitability of the proposed site; • a list of any approvals that must be obtained before the development may commence; • an assessment of the likely impacts of the development on the environment, focussing on the key issues identified below, including: <ul style="list-style-type: none"> • a description of the existing environment likely to be affected by the development, using sufficient baseline/background data; • an assessment of the likely impacts of all stages of the development, including any cumulative impacts, taking into consideration any relevant laws, environmental planning instruments, guidelines, policies, plans and industry codes of practice; • a description of the measures that would be implemented to avoid, minimise, mitigate and/or offset the likely impacts of the development, and an assessment of:

	<ul style="list-style-type: none"> ○ whether these measures are consistent with industry best practice, and represent the full range of reasonable and feasible mitigation measures that could be implemented; ○ the likely effectiveness of these measures; and ○ whether contingency measures would be necessary to manage any residual risks; and ● a description of the measures that would be implemented to monitor and report on the environmental performance of the development; ● a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS; ● consideration of the development against all relevant environmental planning instruments (including Part 3 of the <i>State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007</i>); ● the reasons why the development should be approved, having regard to: <ul style="list-style-type: none"> - relevant matters for consideration under the <i>Environmental Planning and Assessment Act 1979</i>, including the objects of the Act; - the biophysical, economic and social impacts of the development, including the principles of ecologically sustainable development; - the suitability of the site with respect to potential land use conflicts with existing and future surrounding land uses; - feasible alternatives to the development (and its key components), including the consequences of not carrying out the development; ● a signed declaration from the author of the EIS, certifying that the information contained within the document is neither false nor misleading. <p>While not exhaustive, Attachment 1 contains a list of some of the environmental planning instruments, guidelines, policies, and plans that may be relevant to the environmental assessment of this development.</p> <p>In addition to the matters set out in Schedule 1 of the <i>Environmental Planning and Assessment Regulation 2000</i>, the development application must be accompanied by a signed report from a suitably qualified expert that includes an accurate estimate of the capital investment value (as defined in Clause 3 of the <i>Environmental Planning and Assessment Regulation 2000</i>) of the development, including details of all the assumptions and components from which the capital investment value calculation is derived.</p>
<p>Key Issues</p>	<p>The EIS must address the following key issues:</p> <ul style="list-style-type: none"> ● Noise & Blasting – including: <ul style="list-style-type: none"> - a detailed assessment of the likely construction, operational and off- site transport noise impacts of the development in accordance with the <i>Interim Construction Noise Guideline, NSW Noise Policy for Industry</i> and the <i>NSW Road Noise Policy</i> respectively, and having regard to the <i>Voluntary Land Acquisition and Mitigation Policy</i>; - proposed blasting hours, frequency and methods; and - a detailed assessment of the likely blasting impacts of the development (including ground vibrations, overpressure, flyrock, visual and fumes/odour) on people, animals, buildings/structures, infrastructure and significant natural features, having regard to the relevant ANZEC guidelines; ● Air Quality – including: <ul style="list-style-type: none"> - a detailed assessment of potential construction and operational air quality impacts, in accordance with the <i>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW</i>, and with a particular focus on dust emissions including PM_{2.5} and PM₁₀, and having regard to the <i>Voluntary Land Acquisition and Mitigation Policy</i>; ● Water – including: <ul style="list-style-type: none"> - a detailed site water balance, including a description of site water demands, water disposal methods (inclusive of volume and frequency of any water discharges), water supply infrastructure and water storage structures; - identification of any licensing requirements or other approvals under the <i>Water Act 1912</i> and/or <i>Water Management Act 2000</i>;

- demonstration that water for the construction and operation of the development can be obtained from an appropriately authorised and reliable supply in accordance with the operating rules of any relevant Water Sharing Plan (WSP);
- a description of the measures proposed to ensure the development can operate in accordance with the requirements of any relevant WSP or water source embargo;
- an assessment of any likely flooding impacts of the development;
- baseline monitoring data (for both water quality and flows) in Narrambulla Creek, upstream and downstream of the site;
- an assessment of the likely impacts of the development (including flooding, excavation, wastewater, stormwater and erosion) on the quality and quantity of existing surface and ground water resources, including a detailed assessment of:
 - o proposed water discharge quantities and quality against receiving water quality and flow objectives;
 - o impacts on Narrambulla Creek, wetlands, riparian land and sensitive soils (sodic and saline);
 - o impacts on any regional water supply infrastructure;
 - o impacts on adjacent licensed water users and basic landholder rights; and
 - o whether the development can operate to achieve a neutral or beneficial effect on water quality, consistent with *State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011*;
- a detailed description of the proposed water management system (including wastewater and stormwater management), water monitoring program, erosion and sediment control measures, management measures for imported VENM and ENM, and other measures to mitigate surface and groundwater impacts;
- **Biodiversity** – including:
 - accurate predictions of any vegetation clearing on site;
 - a detailed assessment of the likely biodiversity impacts of the development, paying particular attention to threatened species, populations and ecological communities, regional biodiversity corridors and groundwater dependent ecosystems, undertaken in accordance with the *Biodiversity Assessment Method* and documented in a Biodiversity Development Assessment Report; and
 - a strategy to offset any residual impacts of the development in accordance with the *Biodiversity Offsets Scheme*;
- **Heritage** – including:
 - an assessment of the potential impacts on Aboriginal heritage (cultural and archaeological), including evidence of appropriate consultation with relevant Aboriginal communities/parties and documentation of the views of these stakeholders regarding the likely impact of the development on their cultural heritage; and
 - identification of historic heritage in the vicinity of the development and an assessment of the likelihood and significance of impacts on heritage items, with a particular focus on the nearby ‘Wandi’ (Plumb’s Inn) and the potential presence of remnants of the Great South Road;
- **Traffic & Transport** – including:
 - details regarding existing traffic movements along the road network (based on surveys);
 - accurate predictions of the road traffic generated by the construction and operation of the development, including a description of the types of vehicles likely to be used for the transportation of quarry products and importation of VENM and ENM;
 - intersection modelling, incorporating base case and 10-year post-development scenarios;
 - a detailed assessment of the potential traffic impacts of the development on the capacity, condition, safety and efficiency of the local and State road network (as identified above);
 - an assessment of the proposed intersection design, which demonstrates compliance with AUSTROADS requirements and evaluates the

appropriateness of the proposed intersection location, having regard to sight lines and proximity to nearby intersections and the Narrambulla Creek crossing; and

- a description of the measures that would be implemented to mitigate any impacts;
- **Land Resources** – including a detailed assessment of:
 - potential impacts on soils and land capability (including a biosecurity risk assessment and response plan and consideration of potential erosion and land contamination);
 - potential impacts on landforms (topography), paying particular attention to the long-term geotechnical stability of any new landforms (such as overburden dumps, bunds etc); and
 - the compatibility of the development with other land uses in the vicinity of the development in accordance with the requirements in Clause 12 of *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*, paying particular attention to the agricultural land use in the region;
- **Waste** – including:
 - identification of the quantity and nature of all waste streams that would be generated or received by the development (including the likely sources of imported fill materials) and any measures that would be implemented to minimise, manage or dispose of these waste streams; and
 - detailed procedures for the receipt and handling of all clean fill materials, including VENM and ENM, which prevent unauthorised waste disposal;
- **Hazards** – including an assessment of the likely risks to public safety, paying particular attention to potential bushfire risks and the transport, handling and use of any hazardous or dangerous goods;
- **Visual** – including a detailed assessment of the likely visual impacts of the development (before, during and post-mining) on private landowners in the vicinity of the development and key vantage points in the public domain, paying particular attention to any new landforms;
- **Strategic Planning** – including consideration of the *South East and Tablelands Regional Plan 2036*, *Goulburn Mulwaree Strategy 2020* and any other relevant local or regional strategic plans;
- **Social** – including a detailed assessment of the potential social impacts of the development that builds on the findings of the Social Impact Assessment Scoping Report, in accordance with the *Social impact assessment guideline for State significant mining, petroleum production and extractive industry development*, paying particular attention to:
 - how the development might affect people's way of life, community, access to and use of infrastructure, services and facilities, culture, health and wellbeing, surroundings, personal and property rights, decision-making systems, and fears and aspirations;
 - the principles in Section 1.3 of the guideline;
 - the review questions in Appendix D of the guideline; and
 - the recommendations made in Attachment 3;
- **Economic** – including a detailed assessment of the likely economic impacts of the development, paying particular attention to:
 - the significance of the resource;
 - the costs and benefits of the project; identifying whether the development as a whole would result in a net benefit to NSW, including consideration of fluctuation in commodity markets and exchange rates; and
 - the demand on local infrastructure and services; and
- **Rehabilitation** – including the proposed rehabilitation strategy for the site having regard to the key principles in the *Strategic Framework for Mine Closure*, including:
 - rehabilitation objectives, methodology, monitoring programs, performance standards and proposed completion criteria;
 - nominated final land use, having regard to any relevant strategic land use planning or resource management plans or policies; and
 - the potential for integrating this strategy with any other rehabilitation and/or offset strategies in the region.

<p>Consultation</p>	<p>During the preparation of the EIS, you must consult with relevant local, State and Commonwealth Government authorities, service providers, Aboriginal stakeholders, community groups and affected landowners.</p> <p>In particular you must:</p> <ul style="list-style-type: none"> • consult with: <ul style="list-style-type: none"> - affected landowners; - community groups; - Goulburn Mulwaree Council; - Biodiversity and Conservation Division within the Department; - Environment Protection Authority; - Division of Resources and Geoscience within the Department; - Primary Industries (including NSW Forestry, Agriculture and Fisheries); - Crown Lands Group within the Department; - Water Group within the Department; - NSW Health; - Water NSW; - NSW Rural Fire Service; and - Transport for NSW; and • establish a Community Consultative Committee for the project in accordance with the <i>Community Consultative Committee Guidelines for State Significant Projects</i> and consult with the committee during the preparation of the EIS. <p>The EIS must:</p> <ul style="list-style-type: none"> • describe the consultation process used and demonstrate that effective consultation has occurred; • describe the issues raised; • identify where the design of the development has been amended and/or mitigation proposed to address issues raised; and • otherwise demonstrate that issues raised have been appropriately addressed in the assessment.
<p>Further consultation after 2 years</p>	<p>If you do not lodge a development application and EIS for the development within 2 years of the issue date of these requirements, you must consult further with the Planning Secretary in relation to the preparation of the EIS.</p>

ATTACHMENT 1

Environmental Planning Instruments, Policies, Guidelines & Plans

Air	
	Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Developments (DP&E)
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (EPA)
	Generic Guidance and Optimum Model Settings for the CALPUFF Modelling System for Inclusion into the 'Approved Methods for the Modelling and Assessments of Air Pollutants in NSW, Australia'
	National Greenhouse Accounts Factors (Commonwealth)
Noise & Blasting	
	Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Developments (DP&E)
	NSW Noise Policy for Industry (EPA)
	Interim Construction Noise Guideline (DECC)
	NSW Road Noise Policy (EPA)
	Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZEC)
Water	
	NSW State Groundwater Policy Framework Document (NOW)
	NSW State Groundwater Quality Protection Policy (NOW)
	NSW State Groundwater Quantity Management Policy (NOW)
	NSW Aquifer Interference Policy 2012 (NOW)
	Office of Water Guidelines for Controlled Activities (2012)
Groundwater	Groundwater Monitoring and Modelling Plans – Information for prospective mining and petroleum exploration activities (NOW)
	Australian Groundwater Modelling Guidelines 2012 (Commonwealth)
	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
	Guidelines for the Assessment & Management of Groundwater Contamination (EPA)
	State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011
Surface Water	NSW Government Water Quality and River Flow Objectives (EPA)
	Using the ANZECC Guideline and Water Quality Objectives in NSW (EPA)

National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ)

National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ)

National Water Quality Management Strategy: Guidelines for Sewerage Systems – Effluent Management (ARMCANZ/ANZECC)

NSW Water Conservation Strategy (2000)

State Water Management Outcomes Plan

NSW State Rivers and Estuary Policy (1993)

Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (EPA)

Managing Urban Stormwater: Soils & Construction (Landcom) and associated Volume 2E: Mines and Quarries (EPA)

Managing Urban Stormwater: Treatment Techniques (EPA)

Managing Urban Stormwater: Source Control (EPA)

Technical Guidelines: Bunding & Spill Management (EPA)

Environmental Guidelines: Use of Effluent by Irrigation (EPA)

A Rehabilitation Manual for Australian Streams (LWRRDC and CRCCH)

NSW Guidelines for Controlled Activities on Waterfront Land (NOW)

Land

Soil and Landscape Issues in Environmental Impact Assessment (NOW)

Agfact AC.25: Agricultural Land Classification (NSW Agriculture)

Agricultural Issues for Extractive Industries (DPI)

State Environmental Planning Policy No. 55 – Remediation of Land

Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC)

Land Use Conflict Risk Assessment Guide (DPI)

Traffic

Guide to Traffic Generating Development (RMS)

Road Design Guide (RMS) & relevant Austroads Standards

Biodiversity

Biodiversity Assessment Method (OEH)

Fisheries NSW policies and guidelines

Guidelines for developments adjoining Department of Environment, Climate Change and Water (DECCW, 2010)

Guidelines for Threatened Species Assessment (DP&E)

Guidance to assist a decision-maker to determine a serious and irreversible impact (OEH)

NSW State Groundwater Dependent Ecosystem Policy (NOW)

Revocation, recategorisation and road adjustment policy (OEH, 2012)

Risk Assessment Guidelines for Groundwater Dependent Ecosystems (NOW)

State Environmental Planning Policy No. 44 – Koala Habitat Protection

Heritage

The Burra Charter (The Australia ICOMOS charter for places of cultural significance)

Aboriginal Cultural Heritage Consultation Requirements for Proponents (OEH)

Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (OEH)

Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH)

NSW Heritage Manual (OEH)

Statements of Heritage Impact (OEH)

Hazards

State Environmental Planning Policy No. 33 – Hazardous and Offensive Development

Hazardous and Offensive Development Application Guidelines – Applying SEPP 33

Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis

Planning for Bush Fire Protection 2006 (RFS)

Waste

Waste Classification Guidelines (EPA)

Rehabilitation

Mine Rehabilitation – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth)

Mine Closure and Completion – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth)

Strategic Framework for Mine Closure (ANZMEC-MCA)

Social & Economic

Social impact assessment guideline for State significant mining, petroleum production and extractive industry development (DP&E)

Environmental Planning Instruments - General

State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007

State Environmental Planning Policy (State and Regional Development) 2011

State Environmental Planning Policy (Infrastructure) 2007

Goulburn Mulwaree Local Environmental Plan 2009

ATTACHMENT 2

Agency Correspondence